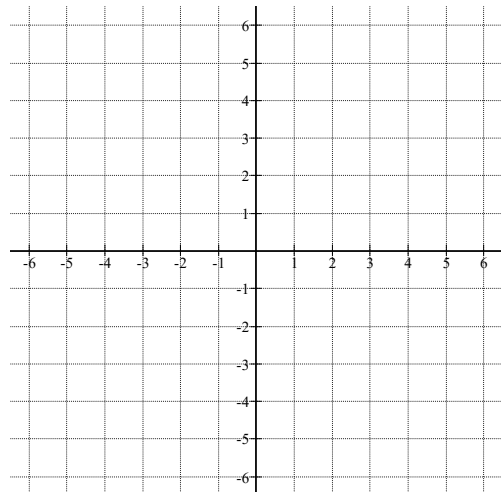


Date: _____

5.2 General Form & Intercepts**General Form:****A linear equation of the form $Ax + By + C = 0$ where $A \in W$ and $B, C \in I$.****Ex.** Rewrite each equation in general form:

$$y = -\frac{2}{3}x + 6$$

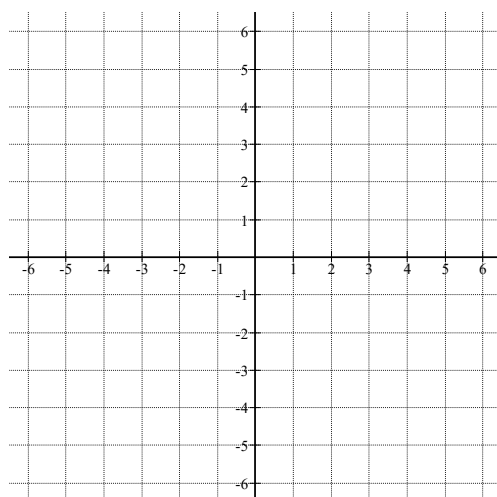
$$y = \frac{3}{4}x - 2$$

Ex. For each linear equation determine the x-intercept, determine the y-intercept, and graph the line using the intercepts:

$$2x - 3y - 6 = 0$$

$$4x + 5y - 20 = 0$$

Ex. Sketch each linear relation and identify the intercepts. Then state the domain & range.



$$y - 3 = 0$$

$$x + 4.5 = 0$$

Ex. Spencer has 66 GB of disk space left on his laptop to fill with television shows and movies that he purchases on-line.

- Suppose a one-hour show uses 1.1 GB of disk space and a movie uses 4.4 GB. Write a linear equation that represents the number of television shows, T , and movies, M , that Spencer can store on his laptop.
- Determine the T -intercept of a graph of the linear equation. What does the T -intercept represent?
- What would the M -intercept be? What does the M -intercept represent?
- If Spencer stores 16 television shows, how many movies does he have space for?